

<u>NEWS 1</u>	Web Page URLs for STN Seminar Schedule - N. America	
<u>NEWS 2</u>	"Ask CAS" for self-help around the clock	
<u>NEWS 3</u>	May 12	EXTEND option available in structure searching
<u>NEWS 4</u>	May 12	Polymer links for the POLYLINK command completed in REGISTRY
<u>NEWS 5</u>	May 27	New UPM (Update Code Maximum) field for more efficient patent SDIs in CAplus
<u>NEWS 6</u>	May 27	CAplus super roles and document types searchable in REGISTRY
<u>NEWS 7</u>	Jun 28	Additional enzyme-catalyzed reactions added to CASREACT
<u>NEWS 8</u>	Jun 28	ANTE, AQUALINE, BIOENG, CIVILENG, ENVIROENG, MECHENG, and WATER from CSA now available on STN(R)
<u>NEWS 9</u>	Jul 12	BEILSTEIN enhanced with new display and select options, resulting in a closer connection to BABS
<u>NEWS 10</u>	Jul 30	BEILSTEIN on STN workshop to be held August 24 in conjunction with the 228th ACS National Meeting
<u>NEWS 11</u>	AUG 02	IFIPAT/IFIUDB/IFICDB reloaded with new search and display fields
<u>NEWS 12</u>	AUG 02	CAplus and CA patent records enhanced with European and Japan Patent Office Classifications
<u>NEWS 13</u>	AUG 02	STN User Update to be held August 22 in conjunction with the 228th ACS National Meeting
<u>NEWS 14</u>	AUG 02	The Analysis Edition of STN Express with Discover! (Version 7.01 for Windows) now available
<u>NEWS EXPRESS</u>	JULY 30 CURRENT WINDOWS VERSION IS V7.01, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 26 APRIL 2004	
<u>NEWS HOURS</u>	STN Operating Hours Plus Help Desk Availability	
<u>NEWS INTER</u>	General Internet Information	
<u>NEWS LOGIN</u>	Welcome Banner and News Items	
<u>NEWS PHONE</u>	Direct Dial and Telecommunication Network Access to STN	
<u>NEWS WWW</u>	CAS World Wide Web Site (general information)	

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SINCE FILE ENTRY TOTAL
SESSION
0.63 0.63
FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 1 AUG 2004 HIGHEST RN 720662-84-0
DICTIONARY FILE UPDATES: 1 AUG 2004 HIGHEST RN 720662-84-0

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

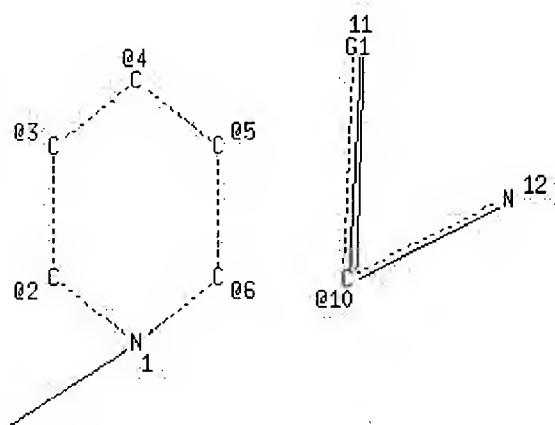
Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
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<http://www.cas.org/ONLINE/DBSS/registryss.html>

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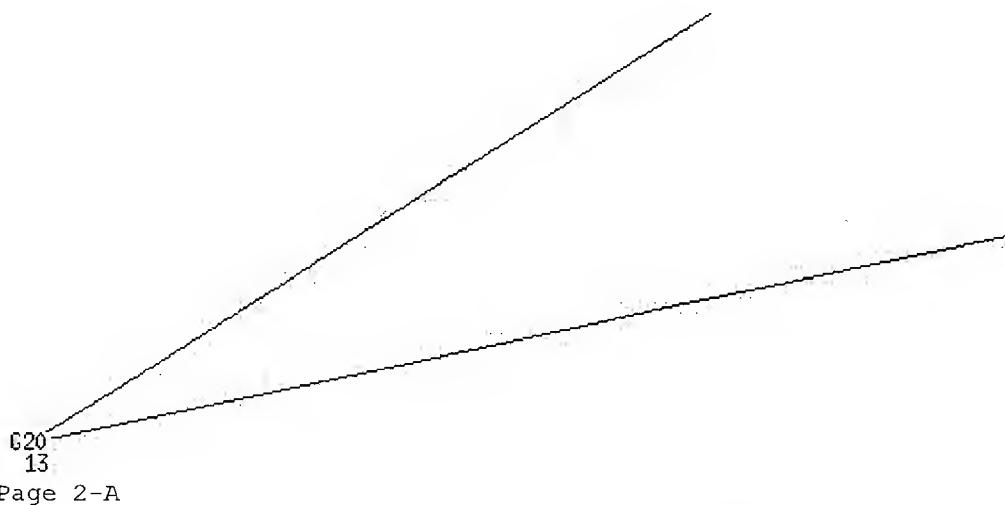
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Page 1-A

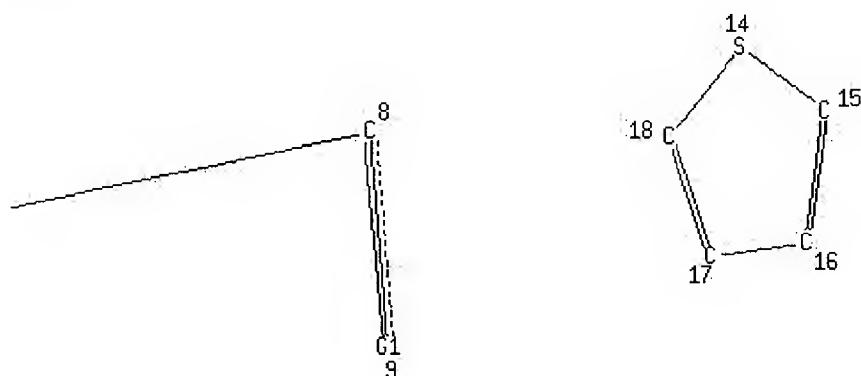


7 CM2

Page 1-B



Page 2-A



Page 2-B

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REP G20=(1-2) 7-1 7-8

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eb

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b

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eb

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DEFAULT ECLEVEL IS LIMITED

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GRAPH ATTRIBUTES:

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RSPEC I
NUMBER OF NODES IS 20

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STEREO ATTRIBUTES: NONE

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L2 3 SEA SSS SAM L1

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DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y
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                           ENTRY SESSION
FULL ESTIMATED COST          157.10 157.73

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FILE 'HCAPLUS' ENTERED AT 14:10:24 ON 02 AUG 2004
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FILE COVERS 1907 - 2 Aug 2004 VOL 141 ISS 6
FILE LAST UPDATED: 1 Aug 2004 (20040801/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13
L4 8 L3

=> s 14 and sankaranarayanan, a?/au
65 SANKARANARAYANAN, A?/AU
L5 8 L4 AND SANKARANARAYANAN, A?/AU

=> d 14, ibib abs fhitstr, 1-8

L4 ANSWER 1 OF 8 HCPLUS COPYRIGHT 2004 ACS on STN

Full Abstract
 Text References

ACCESSION NUMBER: 2003:317444 HCPLUS
DOCUMENT NUMBER: 138:343853
TITLE: Preparation of compositions containing pyridinium derivatives for cosmetic and therapeutic applications
INVENTOR(S): Sankaranarayanan, Alangudi
PATENT ASSIGNEE(S): Torrent Pharmaceuticals Ltd., India
SOURCE: Eur. Pat. Appl., 104 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
<u>EP 1304101</u>	A1	20030423	<u>EP 2001-204295</u>	20011112
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
<u>AU 766824</u>	B2	20031023	<u>AU 2001-31376</u>	20010328
<u>AU 2001031376</u>	A5	20021003		
<u>JP 2003137783</u>	A2	20030514	<u>JP 2001-344128</u>	20011109
<u>CN 1411809</u>	A	20030423	<u>CN 2001-137440</u>	20011112
<u>CN 1411800</u>	A	20030423	<u>CN 2001-137441</u>	20011112
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			<u>IN 2001-CA620</u>	A 20011101

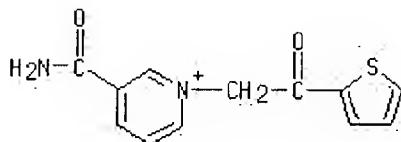
OTHER SOURCE(S): MARPAT 138:343853

AB The invention discloses a new class of compds. particularly pyridinium derivs., which have been found to exhibit triple function of a free

radical scavenger (antioxidant), AGE (advanced glycation end product) breaker and AGE inhibitor, and cosmetic compn. comprising these compds. contained in a cosmetically acceptable carrier. The invention also discloses a method of cosmetic application by applying such compns. The invention further discloses a pharmaceutical compn., comprising the compds. useful in scavenging free radicals from the body cells of a mammal, a method of scavenging free radicals from the body cells of a mammal and a method of treating of diseases caused by accumulation of free radicals in the body cells of a mammal by administering a compn. made with the compds. The invention in addn., also discloses compn. and method for inhibiting AGE in a mammal by use of the compds. of the same group. Thus, a compn. contained pyridinium compd. 0.25, oleic acid 10.0, propylene glycol 70.0, Tween-80 0.1, and EtOH qs to 100.0%.

IT 333797-27-6P

RL: COS (Cosmetic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of compns. contg. pyridinium derivs. for cosmetic and therapeutic applications)

RN 333797-27-6 HCAPLUSCN Pyridinium, 3-(aminocarbonyl)-1-[2-oxo-2-(2-thienyl)ethyl]-, bromide (9CI)
(CA INDEX NAME)# Br⁻

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text ^{138:153445}
 ^{2003:118597} Patent References

ACCESSION NUMBER: 2003:118597 HCAPLUS

DOCUMENT NUMBER: 138:153445

TITLE: Preparation of N-oxoethylpyridinium compounds for the management of age-related and diabetic vascular complications

INVENTOR(S): Sankaranarayanan, Alangudi

PATENT ASSIGNEE(S): Torrent Pharmaceuticals Ltd., India

SOURCE: U.S. Pat. Appl. Publ., 29 pp., Cont.-in-part of U. S. Ser. No. 801,778, abandoned.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003032660	A1	20030213	US 2001-939702	20010828
US 6608094	B2	20030819		
WO 2001025208	A1	20010412	WO 1999-IB1683	19991015

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,

CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6462057 *Npo*

US 2001018524

US 2002103228

PRIORITY APPLN. INFO.:

B1 20021008

A1 20010830

A1 20020801

US 2000-598410

US 2001-801778

US 2001-995731

IN 1999-CA828

WO 1999-IB1683

US 2000-598410

US 2001-801778

IN 1999-CA827

WO 1999-IB1687

US 2000-590143

US 2001-939702

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A2 19991015

A2 20000621

B2 20010309

A 19991006

A1 19991015

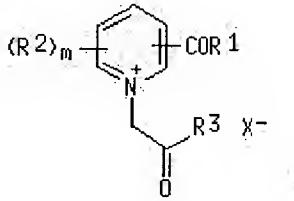
A2 20000609

A1 20010828

OTHER SOURCE(S):

MARPAT 138:153445

GI



AB Title compds. [I; R1 = R4R5, NR7NR7R9; R2 = F, Cl, Br, iodo, acyl, CONR7R10, CO2R7, NR7R10, SR7, etc.; R3 = R7, OR7, NR7R10, N:CR7R10, etc.; R4 = NR7R6O, NR7R6NR7, OR6O, OR6NR7; R6 = alkyl; R5 = alkyl aryl, heteroaryl, COR7, SO2R7, CSNHR7, C(NH)NHR7, COR10, etc.; R7 = H, alkyl, aryl, heteroaryl; R9 = H, alkyl, aryl, heteroaryl, COR10, SO2R10, etc.; R10 = H, alkyl, aryl, heteroaryl; X = halide, OAc, ClO4, BF4, PF6, etc.; m = 0-2; with provisos], were prep'd. Thus, N,N'-bis(nicotinyl)hydrazine and phenacyl bromide were refluxed 6 h in MeOH/iPrOH to give 60% N,N'-bis[3-carbonyl-1-(2-phenyl-2-oxoethyl)pyridinium]hydrazine dibromide. Tested I gave 13-92.64% advanced glycation end product (AGE) breaking at 1-50 mM. Novel compds. of the pyridinium series useful for the management of diabetes and aging-related vascular and neurovascular complications, including kidney disease, nerve damage, atherosclerosis, retinopathy, inflammatory disorders, immunol. disorders, oxidative stress, dermatol. disorders and discoloration of teeth, by breaking preformed AGE, of the general formula I, or pharmaceutically acceptable salts thereof, wherein, R1, R2, R3, X and m are as defined in the specification.

IT 333797-94-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(claimed compd.; prepn. of N-oxoethylpyridinium compds. for the management of age-related and diabetic vascular complications)

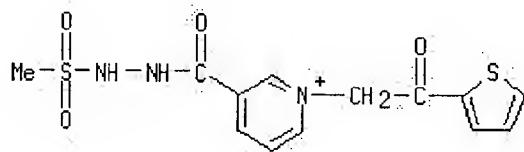
RN 333797-94-7 HCPLUS

CN Pyridinium, 3-[(2-(methylsulfonyl)hydrazino)carbonyl]-1-[2-oxo-2-(2-thienyl)ethyl]-, bromide (9CI) (CA INDEX NAME)

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eb



Br. -

L4 ANSWER 3 OF 8 HCPLUS COPYRIGHT 2004 ACS on STN

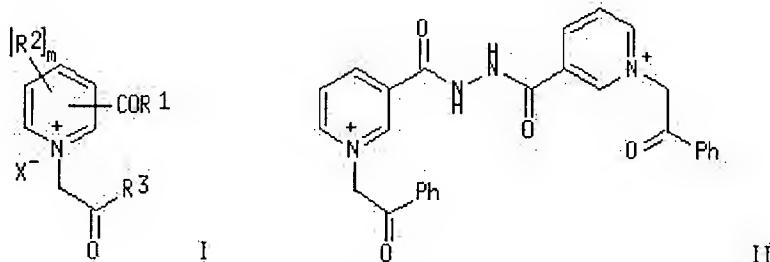
Full
Text
Search
Preferences

ACCESSION NUMBER: 2002:770131 HCAPLUS
DOCUMENT NUMBER: 137:279097
TITLE: Preparation of novel pyridinium compounds for the
management of aging-related and diabetic vascular
complications
INVENTOR(S): Sankaranarayanan, Alangudi
PATENT ASSIGNEE(S): Torrent Pharmaceuticals, Ltd., India
SOURCE: U.S., 10 pp., Cont.-in-part of WO 2001 25,208.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6462057 - <u>no</u>	B1	20021008	US 2000-598410	20000621
WO 2001025208	A1	20010412	WO 1999-IB1683	19991015
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2001018524 - <u>no</u>	A1	20010830	US 2001-801778	20010309
US 2003032660	- <u>no</u>	20030213	US 2001-939702	20010828
US 6608094	- <u>already</u>	B2	20030819	
US 2002103228 - <u>no</u>	A1	20020801	US 2001-995731	20011129
US 2003092744	A1	20030515	US 2002-214704	20020809
US 6624178	B2	20030923		

<u>PRIORITY APPLN. INFO.:</u>	<u>IN 1999-CA828</u>	A 19991006
<i>Same</i>	<u>WO 1999-IB1683</u>	A2 19991015
<i>#0214704</i>	<u>IN 1999-CA827</u>	A 19991006
	<u>WO 1999-IB1687</u>	A1 19991015
	<u>US 2000-590143</u>	A2 20000609
	<u>US 2000-598410</u>	A2 20000621
	<u>US 2001-801778</u>	B2 20010309
	<u>US 2001-939702</u>	A1 20010828

OTHER SOURCE(S): MARPAT 137:279097
GI



AB The title compds. [I; R1 = (un)substituted hydrazino, 2-benzyloxyethoxy, 2-benzyloxyethylamino, etc.; R2 = halo, NO₂, alkyl, etc.; R3 = 2-thienyl, phenylamino, Ph, etc.; X = halide, acetate, perchlorate, etc.; m = 0-2; with the provisos], useful for the management of diabetes and aging-related vascular complications, including kidney disease, nerve damage, atherosclerosis, retinopathy, dermatol. disorders and discoloration of teeth, by breaking preformed AGE, were prep'd. and formulated. Thus, reacting N,N'-bis-(nicotinoyl)hydrazine with phenacyl bromide in MeOH/iso-ProOH afforded 60% II.2Br⁻ which showed 13% AGE breakage at 5 mM. Also disclosed is a method of treatment of a diabetic patient by administering the compds. as defined above, either singly or in combination with drugs for antidiabetic therapy.

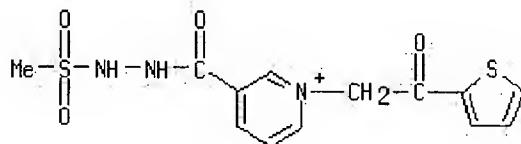
IT 333797-94-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of novel pyridinium compds. for treating diseases caused by diabetes and aging related complications)

RN 333797-94-7 HCAPLUS

CN Pyridinium, 3-[2-(methylsulfonyl)hydrazino]carbonyl]-1-[2-oxo-2-(2-thienyl)ethyl]-, bromide (9CI) (CA INDEX NAME)



Br⁻

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text References

ACCESSION NUMBER: 2002:733981 HCAPLUS

DOCUMENT NUMBER: 137:247608

TITLE: Preparation of pyridinium compounds useful for the treatment of advanced glycation end product (AGE)-related diseases

INVENTOR(S): Sankaranarayanan, Alangudi

PATENT ASSIGNEE(S): Torrent Pharmaceuticals Ltd., India

SOURCE: Eur. Pat. Appl., 42 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1243581	A1	20020925	EP 2001-201057	20010321
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2002275158	A2	20020925	JP 2001-81819	20010322
CN 1377880	A	20021106	CN 2001-112413	20010330

PRIORITY APPLN. INFO.:

AB Disclosed are novel pyridinium compds. useful for the management of diabetes and aging-related vascular complications, including kidney disease, nerve damage, atherosclerosis, retinopathy, dermatol. disorders and discoloration of teeth. Thus, N-benzenesulfonylisonicotinic hydrazide and EtO₂CCH₂Br were refluxed 24 h in Me₂CHOH to give 60% 1-(2-ethoxy-2-oxoethyl)-4-(phenylsulfonylhydrazinocarbonyl)pyridinium bromide. Title compds. showed 14-95.36% AGE-breaking activity at 1-25 mM.

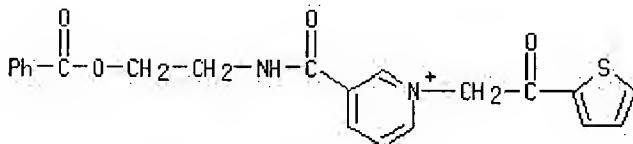
IT 333798-06-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(claimed compd.; prepn. of pyridinium compds. useful for treatment of advanced glycation end product (AGE)-related diseases)

RN 333798-06-4 HCPLUS

CN Pyridinium, 3-[[[2-(benzoyloxy)ethyl]amino]carbonyl]-1-[2-oxo-2-(2-thienyl)ethyl]-, bromide (9CI) (CA INDEX NAME)

# Br⁻

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 8 HCPLUS COPYRIGHT 2004 ACS on STN

Full Text
References

ACCESSION NUMBER: 2002:727098 HCPLUS
 DOCUMENT NUMBER: 137:247606
 TITLE: Preparation of oxoethylpyridinium halides having AGE breaking activity for treatment of senile disease and complication of diabetes
 INVENTOR(S): Sankaranarayanan, Alangudi
 PATENT ASSIGNEE(S): Trent Pharmaceuticals Limited., India
 SOURCE: Jpn. Kokai Tokkyo Koho, 32 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 2002275158
EP 1243581

A2 20020925
A1 20020925

JP 2001-81819
EP 2001-201057

20010322
20010321

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.:

EP 2001-201057

A 20010321

OTHER SOURCE (S): MARPAT 137:247606

AB N,N'-bis[3-carbonyl-1-(2-thien-2'-yl-2-oxoethyl)pyridinium]hydrazine dichloride, N,N'-bis[3-carbonyl-1-(2-cyclopropylamino-2-oxoethyl)pyridinium]hydrazine dichloride, 1-(2-phenylamino-2-oxoethyl)-4-(phenylsulfonylhydrazinocarbonyl)pyridinium chloride or its pharmaceutically acceptable salt, 1-[2-(2',4'-dichlorophenyl)-2-oxoethyl]-3-[2-(methoxy)ethyloxycarbonyl]pyridinium bromide or its pharmaceutically acceptable salt, 1-(2-phenylamino-2-oxoethyl)-3-[benzoyloxy]ethylaminocarbonyl]pyridinium chloride or its pharmaceutically acceptable salt, and other oxoethylpyridinium halides are prep'd. The compds. are useful for treatment of senile disease and complication of diabetes as renal disease, nerve damage, retinopathy, atherosclerosis, microangiopathy, endodermis function disorder, and teeth discoloration. N-(benzenesulfonyl)isonicotinic acid hydrazide (1.0 g) was treated with 0.6 g Et bromoacetate in iso-PrOH under reflux for 24 h to give 1.05 g 1-(2-ethoxy-2-oxoethyl)-4-(phenylsulfonylhydrazinocarbonyl)pyridinium bromide. The compds. showed good breaking activity at 1-20 mM concn.

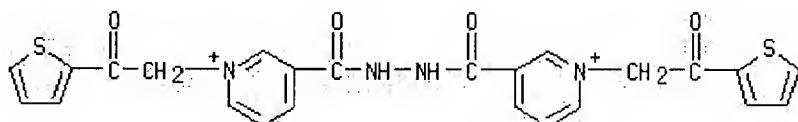
IT 333797-95-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of oxoethylpyridinium halides having AGE breaking activity for treatment of senile disease and complication of diabetes)

RN 333797-95-8 HCAPLUS

CN Pyridinium, 3,3'-(hydrazodicarbonyl)bis[1-[2-oxo-2-(2-thienyl)ethyl]-, dibromide (9CI) (CA INDEX NAME)

# 2 Br⁻

L4 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN

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 INDEXED
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ACCESSION NUMBER:

2001:643433 HCAPLUS

DOCUMENT NUMBER:

135:210943

TITLE:

Preparation of novel pyridinium compounds for the management of aging-related and diabetic vascular complications

INVENTOR(S):

Sankaranarayanan, Alangudi

PATENT ASSIGNEE(S):

India

SOURCE:

U.S. Pat. Appl. Publ., 19 pp., Cont.-in-part of U.S. Ser. No. 598,410.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

5

PATENT INFORMATION:

h

eb c

g cg b

cg

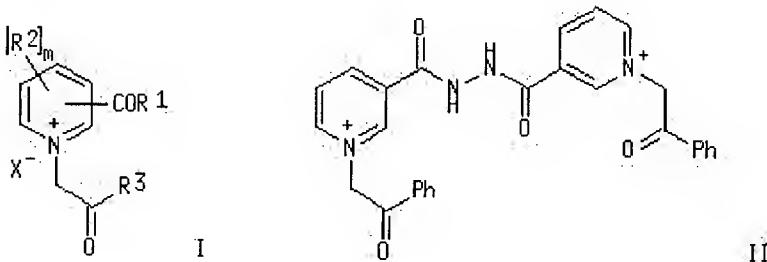
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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
<u>US 2001018524</u>	A1	20010830	<u>US 2001-801778</u>	20010309
<u>WO 2001025208</u>	A1	20010412	<u>WO 1999-IB1683</u>	19991015
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
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<u>US 2003032660</u>	A1	20030213	<u>US 2001-939702</u>	20010828
<u>US 6608094</u>	B2	20030819		
<u>US 2002103228</u>	A1	20020801	<u>US 2001-995731</u>	20011129
<u>PRIORITY APPLN. INFO.:</u>				
			<u>IN 1999-CA828</u>	A 19991006
			<u>WO 1999-IB1683</u>	A2 19991015
			<u>US 2000-598410</u>	A2 20000621
			<u>IN 1999-CA827</u>	A 19991006
			<u>WO 1999-IB1687</u>	A1 19991015
			<u>US 2000-590143</u>	A2 20000609
			<u>US 2001-801778</u>	B2 20010309
			<u>US 2001-939702</u>	A1 20010828

OTHER SOURCE(S):

MARPAT 135:210943

GI



AB The title compds. [I; R1 = (un)substituted hydrazino, 2-benzyloxyethoxy, 2-benzyloxyethylamino, etc.; R2 = halo, NO₂, alkyl, etc.; R3 = 2-thienyl, phenylamino, Ph, etc.; X = halide, acetate, perchlorate, etc.; m = 0-2], useful for the management of diabetes and aging-related vascular complications, including kidney disease, nerve damage, atherosclerosis, retinopathy, dermatol. disorders and discoloration of teeth, by breaking preformed AGE, were prep'd. Thus, reacting N,N'-bis-(nicotinoyl)hydrazine with phenacyl bromide in MeOH/iso-PrOH afforded 60% II.2Br- which showed 13% AGE breakage at 5 mM. Also disclosed is a method of treatment of a diabetic patient by administering the compds. as defined above, either singly or in combination with drugs for antidiabetic therapy.

IT 333797-94-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of novel pyridinium compds. for the management of aging-related and diabetic vascular complications)

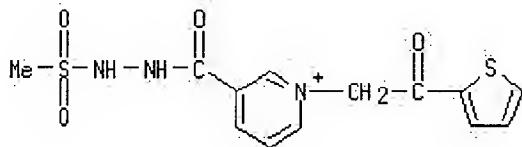
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eb c g cg b cg

eb

RN 333797-94-7 HCAPLUS

CN Pyridinium, 3-[(2-(methylsulfonyl)hydrazino)carbonyl]-1-[2-oxo-2-(2-thienyl)ethyl]-, bromide (9CI) (CA INDEX NAME)

# Br⁻

L4 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN

 FULL
 Text

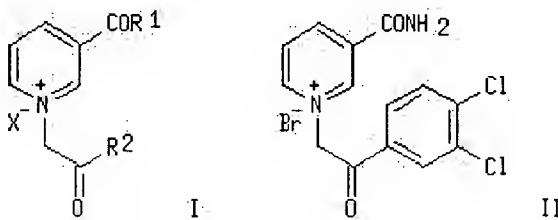
ACCESSION NUMBER: 2001:265393 HCAPLUS
 DOCUMENT NUMBER: 134:280716
 TITLE: Preparation of pyridinium derivatives for the treatment of diabetic and aging-related vascular complications
 INVENTOR(S): Sankaranarayanan, Alangudi
 PATENT ASSIGNEE(S): India
 SOURCE: PCT Int. Appl., 42 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001025209	A1	20010412	WO 1999-IB1687	19991015
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RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
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EP 1220843	A1	20020710	EP 1999-974071	19991015
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BR 9915962	A	20030107	BR 1999-15962	19991015
JP 2003511370	T2	20030325	JP 2001-528155	19991015
US 2002103228	A1	20020801	US 2001-995731	20011129
<u>PRIORITY APPLN. INFO.:</u>				
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		IN 1999-CA828	A	19991006
		WO 1999-IB1683	A2	19991015
		WO 1999-IB1687	W	19991015
		US 2000-590143	A2	20000609
		US 2000-598410	A2	20000621
		US 2001-801778	A2	20010309
		US 2001-939702	A1	20010828

OTHER SOURCE(S): MARPAT 134:280716

GI



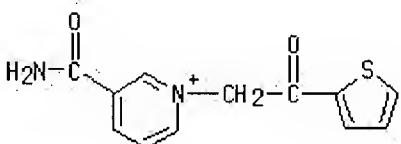
AB The title compds. [I; R1 = YR3 (wherein Y = O, NH; R3 = H, alkyl, aryl); R2 = alkyl, O(alkyl), aryl, etc.; X = halide, acetate, perchlorate], useful for the management of diabetes and aging-related vascular complications, and particularly in the treatment of complications of diabetes mellitus and other aging-related conditions including kidney disease, nerve damage, atherosclerosis, retinopathy, dermatol. conditions and discoloration of teeth by breaking preformed AGE, were prepd. and formulated. Thus, reacting nicotinamide with 2,4-dichlorophenacyl bromide in refluxing PhMe afforded 39% the bromide II. Biol. data for compds. I (such as % AGE breaking activity) was given. The invention further discloses a method of treatment of a diabetic patient by administering the compds. I, either singly or in combination with other drugs for antidiabetic therapy.

IT 333797-27-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of pyridinium derivs. for the treatment of diabetic and aging-related vascular complications)

RN 333797-27-6 HCAPLUS

CN Pyridinium, 3-(aminocarbonyl)-1-[2-oxo-2-(2-thienyl)ethyl]-, bromide (9CI)
(CA INDEX NAME)



Br-

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text References

ACCESSION NUMBER: 2001:265392 HCAPLUS
 DOCUMENT NUMBER: 134:280715
 TITLE: Preparation of novel pyridinium derivatives for the management of aging-related and diabetic vascular complications
 INVENTOR(S): Sankaranarayanan, Alangudi
 PATENT ASSIGNEE(S): India
 SOURCE: PCT Int. Appl., 46 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

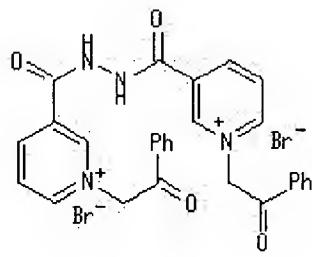
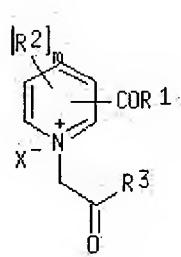
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
<u>WO 2001025208</u>	A1	20010412	<u>WO 1999-IB1683</u>	19991015
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
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<u>AU 9959942</u>	A1	20010510	<u>AU 1999-59942</u>	19991015
<u>AU 769940</u>	B2	20040212		
<u>BR 9913746</u>	A	20020423	<u>BR 1999-13746</u>	19991015
<u>EP 1222171</u>	A1	20020717	<u>EP 1999-973986</u>	19991015
<u>EP 1222171</u>	B1	20040225		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
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<u>CZ 291789</u>	B6	20030514	<u>CZ 2001-1033</u>	19991015
<u>RU 2215000</u>	C2	20031027	<u>RU 2001-107007</u>	19991015
<u>AT 260256</u>	E	20040315	<u>AT 1999-973986</u>	19991015
<u>US 6462057</u>	B1	20021008	<u>US 2000-598410</u>	20000621
<u>US 2001018524</u>	A1	20010830	<u>US 2001-801778</u>	20010309
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<u>US 2003092744</u>	A1	20030515	<u>US 2002-214704</u>	20020809
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<u>PRIORITY APPLN. INFO.:</u>				
			<u>IN 1999-CA828</u>	A 19991006
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			<u>WO 1999-IB1683</u>	W 19991015
			<u>WO 1999-IB1687</u>	A1 19991015
			<u>US 2000-590143</u>	A2 20000609
			<u>US 2000-598410</u>	A2 20000621
			<u>US 2001-801778</u>	B2 20010309
			<u>US 2001-939702</u>	A1 20010828

OTHER SOURCE(S):

MARPAT 134:280715

GI



AB The title compds. [I; R1 = R4R5, NR7NR7R9; R2 = F, Cl, Br, etc.; R3 = R7, OR7, etc.; R4 = NR7R6O, NR7R6NR7, OR6O, etc.; R5 = alkyl, aryl, heteroaryl, etc.; R6 = alkyl; R7 = H, alkyl, aryl, etc.; X = halide,

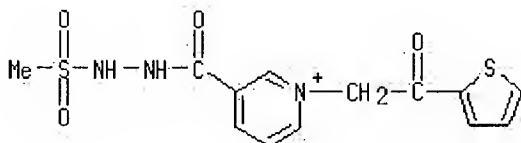
acetate, perchlorate, etc.; m = 0-2], useful for the management of diabetes and aging-related vascular complications, including kidney disease, nerve damage, atherosclerosis, retinopathy, dermatol. disorders and discoloration of teeth, by breaking preformed AGE, were prep'd. and formulated. Thus, reacting N,N'-bis(nicotinoyl)hydrazine with phenacyl bromide in MeOH/iso-ProH afforded 60% II which showed 13% AGE breakage at 5 mM. The invention further discloses a method of treatment of a diabetic patient by administering the compds. I, either singly or in combination with drugs for antidiabetic therapy.

IT 333797-94-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prep'n. of pyridinium derivs. for the management of aging-related and diabetic vascular complications)

RN 333797-94-7 HCAPLUS

CN Pyridinium, 3-[(2-(methylsulfonyl)hydrazino]carbonyl]-1-[2-oxo-2-(2-thienyl)ethyl]-, bromide (9CI) (CA INDEX NAME)



Br⁻

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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(FILE 'HOME' ENTERED AT 14:05:30 ON 02 AUG 2004)

FILE 'REGISTRY' ENTERED AT 14:07:10 ON 02 AUG 2004

L1 STRUCTURE uploaded
L2 3 S L1
L3 55 S L1 FULL

FILE 'HCAPLUS' ENTERED AT 14:10:24 ON 02 AUG 2004

L4 8 S L3
L5 8 S L4 AND SANKARANARAYANAN, A?/AU

=> s l4 and comp?

10228579 COMP?

L6 8 L4 AND COMP?

=> s l4 and composition?

921316 COMPOSITION?

1289261 COMPN

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(COMPN OR COMPNS)

2030629 COMPOSITION?

(COMPOSITION? OR COMPN)

L7 1 L4 AND COMPOSITION?

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L7 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN

FULL SUMMARY
 Text REFERENCES

ACCESSION NUMBER: 2003:317444 HCAPLUS
 DOCUMENT NUMBER: 138:343853
 TITLE: Preparation of **compositions** containing pyridinium derivatives for cosmetic and therapeutic applications
 INVENTOR(S): Sankaranarayanan, Alangudi
 PATENT ASSIGNEE(S): Torrent Pharmaceuticals Ltd., India
 SOURCE: Eur. Pat. Appl., 104 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
<u>EP 1304101</u>	A1	20030423	<u>EP 2001-204295</u>	20011112
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
<u>AU 766824</u>	B2	20031023	<u>AU 2001-31376</u>	20010328
<u>AU 2001031376</u>	A5	20021003		
<u>JP 2003137783</u>	A2	20030514	<u>JP 2001-344128</u>	20011109
<u>CN 1411809</u>	A	20030423	<u>CN 2001-137440</u>	20011112
<u>CN 1411800</u>	A	20030423	<u>CN 2001-137441</u>	20011112
<u>PRIORITY APPLN. INFO.:</u>			<u>IN 2001-CA605</u>	A 20011019
			<u>IN 2001-CA620</u>	A 20011101

OTHER SOURCE(S): MARPAT 138:343853

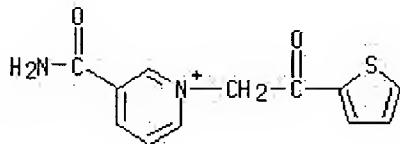
AB The invention discloses a new class of compds. particularly pyridinium derivs., which have been found to exhibit triple function of a free radical scavenger (antioxidant), AGE (advanced glycation end product) breaker and AGE inhibitor, and cosmetic **compn.** comprising these compds. contained in a cosmetically acceptable carrier. The invention also discloses a method of cosmetic application by applying such **compns.** The invention further discloses a pharmaceutical **compn.**, comprising the compds. useful in scavenging free radicals from the body cells of a mammal, a method of scavenging free radicals from the body cells of a mammal and a method of treating of diseases caused by accumulation of free radicals in the body cells of a mammal by administering a **compn.** made with the compds. The invention in addn., also discloses **compn.** and method for inhibiting AGE in a mammal by use of the compds. of the same group. Thus, a **compn.** contained pyridinium compd. 0.25, oleic acid 10.0, propylene glycol 70.0, Tween-80 0.1, and EtOH qs to 100.0%.

IT 333797-27-6P

RL: COS (Cosmetic use); PAC (Pharmacological activity); SPN (synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of **compns.** contg. pyridinium derivs. for cosmetic and therapeutic applications)

RN 333797-27-6 HCAPLUS

CN Pyridinium, 3-(aminocarbonyl)-1-[2-oxo-2-(2-thienyl)ethyl]-, bromide (9CI)
 (CA INDEX NAME)



Br⁻

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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COST IN U.S. DOLLARS

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DISCOUNT AMOUNTS (F)

SINCE FILE ENTRY	TOTAL SESSION -6 62
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USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

⇒ $\exists x \exists y$

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FILE 'REGISTRY' ENTERED AT 14:07:10 ON 02 AUG 2004

L1 STRUCTURE UPLOADED
L2 3 S L1
L3 55 S L1 FULL

FILE 'HCAPLUS' ENTERED AT 14:10:24 ON 02 AUG 2004

L4 8 S L3
L5 8 S L4 AND SANKARANARAYANAN, A?/AU
L6 8 S L4 AND COMP?
L7 1 S L4 AND COMPOSITION?

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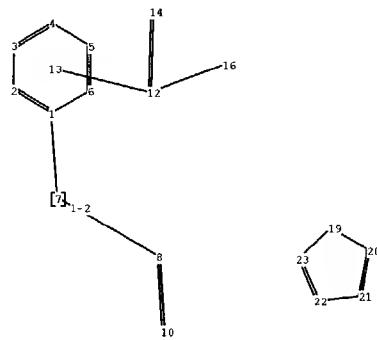
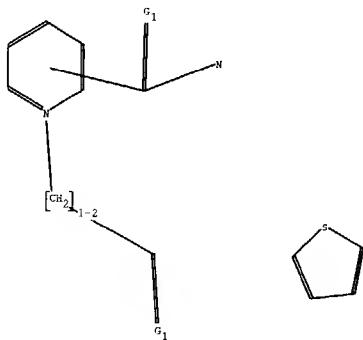
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L8 0 L3

eb

=>

h eb c g cg b cg

eb



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7 8 10 12 14 16

ring nodes :

1 2 3 4 5 6 19 20 21 22 23

chain bonds :

1-7 7-8 8-10 12-14 12-16

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 19-20 19-23 20-21 21-22 22-23

exact/norm bonds :

8-10 12-14 12-16

exact bonds :

1-7 7-8 19-20 19-23 20-21 21-22 22-23

normalized bonds :

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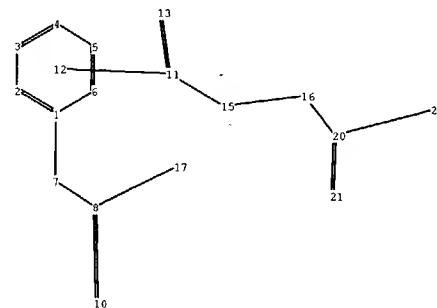
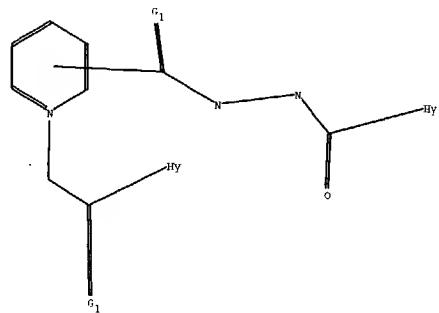
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containing 1 : 19 :

G1:0,S

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 10:CLASS 12:CLASS
13:CLASS 14:CLASS 16:CLASS 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom



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chain nodes :
 7 8 10 11 13 17 21 22
ring nodes :
 1 2 3 4 5 6
ring/chain nodes :
 15 16 20
chain bonds :
 1-7 7-8 8-10 8-17 11-13 11-15 20-21 20-22
ring/chain bonds :
 15-16 16-20
ring bonds :
 1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
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exact bonds :
 7-8
normalized bonds :
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isolated ring systems :
 containing 1 :

G1:0,S

Match level :
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 12:CLASS 13:CLASS 15:Atom 16:Atom 17:Atom 20:CLASS 21:CLASS 22:Atom
Generic attributes :
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 Saturation : Unsaturated

Element Count :
 Node 17: Limited
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